

RV-130



# T-CELL INFUSION STUDY

## "CD4 Zeta"

A new procedure has been found that takes some T-helper cells (CD4 cells) from the blood of an HIV-infected person, grows the cells in the laboratory and then gives these cells back using a needle put into a vein of the arm. So far, this has been shown to be safe and without many side-effects.

"CD4 Zeta" is a next step. CD4 Zeta is a "Gene Therapy" for HIV-infection. In this 5 month long study, some of your T-helper cells will be removed. Then, a small genetic code will be put into the removed T-cells. These cells will then be grown and increased in number in the laboratory, then given back to you. The small change in the gene of the T-cells lets them be tracked through the body; to include letting scientists know how long they live, where they go, and if they can reproduce. The genetic code placed into some of your T-cells is designed to seek out HIV-infected cells, attack and kill them. This study requires rectal biopsies where tiny snips of skin inside your rectum are removed to track the CD4 Zeta T-cells.

This study will also use Interleukin-2 (IL-2), which is a natural product found in the body that makes T-cells grow. In HIV, patients' IL-2 levels are often lowered. In this study, laboratory-made IL-2 will be given as a shot into the fat under your skin.

There are 3 arms in this study:

- Group 1: (8 people) will get IL-2 shots
- Group 2: (8 people) will get one dose of CD4-Zeta-gene-changed T-helper cells
- Group 3: (8 people) will get IL-2 shots and one dose of CD4-Zeta-gene-changed T-helper cells

A computer will assign you to one of these groups. Everyone in the CD4 Zeta Study will know what research treatment they are getting.

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**PURPOSE** Using CD4-Zeta-gene-changed T-helper cells, find out how long they live, where they travel in the body, and whether they decrease the amount of HIV in 24 HIV-infected persons.

### **INCLUSION CRITERIA**

- ❖ Live locally;
- ❖ DoD Healthcare Beneficiary;
- ❖ 18 years or older;
- ❖ HIV-positive;
- ❖ Successful antiretroviral treatment of 2 or more drugs for at least 8 weeks before the study; and willing to stay on this during the whole study;
- ❖ Undetectable viral load for at least 8 weeks before the study;
- ❖ Average T-helper cells  $\geq 200 \text{ mm}^3$
- ❖ Able to give informed consent
- ❖ See protocol coordinator for more details and other requirements

### **POTENTIAL BENEFITS**

- ❖ Increased T-helper cell count
- ❖ Find out if CD4 Zeta is additive to anti-HIV drug treatment;
- ❖ Possible improvement of how well your T-cells work

### **PRINCIPAL INVESTIGATOR NAME AND ADDRESS**

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### **STUDY LOCATION**

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### **CONTACT PERSON**

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